



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of Goddard et al) Examiner: Nancy Vogel
Serial No. 10/677,471) Group Art Unit: 1636
Filed: October 2, 2003) Confirmation No. 1021
Title: SECRETED AND) Attorney's Docket No. 10466/484
TRANSMEMBRANE)
POLYPEPTIDES AND NUCLEIC)
ACIDS ENCODING THE SAME)

DECLARATION OF AUDREY GODDARD, Ph.D., PAUL J. GODOWSKI, Ph.D.,
J. CHRISTOPHER GRIMALDI, AUSTIN L. GURNEY, Ph.D., DANIEL TUMAS,
Ph.D. AND WILLIAM I. WOOD, Ph.D. UNDER 37 CFR § 1.131

MAIL STOP AMENDMENT

The Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

We, Audrey Goddard, Ph.D., Paul J. Godowski, Ph.D., J. Christopher Grimaldi, Austin Gurney, Ph.D., Daniel Tumas, Ph.D. and William I. Wood, Ph.D. declare and say as follows:

1. We are the inventors of the above-identified application.
2. At the time the present invention was made, one of the inventors, Daniel Tumas, Ph.D., was responsible for overseeing the testing of novel polypeptides, including the polypeptide PRO361, in an assay of inhibitory activity in the mixed lymphocyte relation (MLR) (Assay #67, Example 34). This assay is used to find agents that are active as inhibitors of the proliferation of stimulated T-lymphocytes. Compounds which inhibit proliferation of lymphocytes are useful therapeutically where suppression of an immune response is beneficial.
3. The basic protocol for this assay is described in Current Protocols in Immunology, unit 3.12, edited by J E Coligan, A M Kruisbeek, D H Marglies, E M Shevach, W Strober, National Institutes of Health, Published by John Wiley & Sons, Inc.

More specifically, in one assay variant, peripheral blood mononuclear cells (PBMC) are isolated from mammalian individuals, for example a human volunteer, by leukopheresis (one donor will supply stimulator PBMCs, the other donor will supply responder PBMCs). If desired, the cells are frozen in fetal bovine serum and DMSO after isolation. Frozen cells may be thawed overnight in assay media (37°C, 5% CO₂) and then washed and resuspended to 3x10⁶ cells/ml of assay media (RPMI; 10% fetal bovine serum, 1% penicillin/streptomycin, 1% glutamine, 1% HEPES, 1% non-essential amino acids, 1% pyruvate). The stimulator PBMCs are prepared by irradiating the cells (about 3000 Rads).

The assay is prepared by plating in triplicate wells a mixture of:

100:1 of test sample diluted to 1% or to 0.1%,
50:1 of irradiated stimulator cells, and
50:1 of responder PBMC cells.

100 microliters of cell culture media or 100 microliter of CD4-IgG is used as the control. The wells are then incubated at 37°C, 5% CO₂ for 4 days. On day 5, each well is pulsed with tritiated thymidine (1.0 mC/well; Amersham). After 6 hours the cells are washed 3 times and then the update of the label is evaluated.

In another variant of this assay, PBMCs are isolated from the spleens of Balb/c mice and C57B6 mice. The cells are teased from freshly harvested spleens in assay media (RPMI; 10% fetal bovine serum, 1% penicillin/streptomycin, 1% glutamine, 1% HEPES, 1% non-essential amino acids, 1% pyruvate) and the PBMCs are isolated by overlaying these cells over Lympholyte M (Organon Teknika), centrifuging at 2000 rpm for 20 minutes, collecting and washing the mononuclear cell layer in assay media and resuspending the cells to 1x10⁷ cells/ml of assay media. The assay is then conducted as described above.

Any decrease below control is considered to be a positive result for an inhibitory compound, with decreases of less than or equal to 80% being preferred. However, any value less than control indicates an inhibitory effect for the test protein. The results are indicative of the utility of the PRO polypeptides

in therapeutic applications where suppression of an immune response is beneficial.

4. Copies of pages from an internal database showing the positive results for the PRO361 polypeptide (SEQ ID NO: 83), identified by Pin number PIN996-1, in Assay #67 are attached to this declaration (with dates redacted) as Exhibit A. These experiments were performed and the results were obtained in the United States prior to August, 1999.

5. Exhibit A clearly shows that the polypeptide designated PRO361 was tested, and its ability to inhibit the mixed leukocyte reaction was determined prior to August, 1999. .

6. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information or belief are believed to be true, and further that these statements were made with the knowledge that willful statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

Audrey Goddard
Audrey Goddard, Ph.D.

1/12/08

Paul J. Godowski, Ph.D.

Date

J. Christopher Grimaldi

Date

Austin L. Gurney, Ph.D.

Date

Daniel Tumas, Ph.D.

Date

William I. Wood, Ph.D.

Date

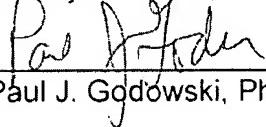
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Audrey Goddard, Ph.D.



Paul J. Godowski, Ph.D.

Date

12/19/07

Date

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Paul J. Godowski, Ph.D.

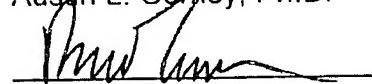
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Austin L. Gurney, Ph.D.

Date

Daniel Tumas, Ph.D.

Date

William I. Wood
William I. Wood, Ph.D.

12/14/17
Date

EXHIBIT A



Assay Viewer

SPDI Assays

SEARCH | **REQUEST SYSTEMS** | **ANALYSIS TOOLS** | **RESOURCES** | **Historical SDOI Record** | **Quick search:** **DNA** | **Enter ID number:** **Next** | **Logout**

Assay Viewer

SPDI Assays

AS75 Rod Photoreceptor Cell Canine Sympathy 2 Da
AS75 Rat DRG Neurons Survival Inhibition by DNA
AS75 Ventralization of Embryos Endothelial Cells by DNA
AS76 Benodoma Sera of Newborn Embryo by DNA
AS76 Sera Benodoma Sera of Newborn Embryo by DNA
AS76 Sera Benodoma Sera of Newborn Embryo by DNA
AS76 Human Embryo Stem Cell Differentiation
AS76 Human Embryo Stem Cell Differentiation
AS76 HUVEC Survival in Absence of Serum
AS76 Inhibition of Adipocyte Differentiation
AS76 MRL • Laboratory

All Positive | Verified Positive | Pending

ASSAY RESULT LIST		Rows 1 - 4 of 4		Page 1 of 1		Select Page Page No. 1	
ASAY	ASY Name	LOT	ITEMS	TEST	RESULT	SDS	Protein Name
AS7	EUB(DP)DNA	LO72126	PIN996-1	nH	SDS1	6.12	UNQ
AS7192	EUB-1m	LO72126	PIN996-1	nH	SDS1	77.3	Human MANS1 IgG
AS762	MUR-1m	LO72126	PIN996-1	nH	SDS1	64.7	Human MANS1 IgG
AS762	MUR-1m	LO72126	PIN996-1	nH	SDS1	99.4	Human MANS1 IgG

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